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| 10/582,544 | 06/09/2006 | Keiichi Matsuhashi | 0670-7077 | 4764 |

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| EXAMINER |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)☒ Responsive to communication(s) filed on *24 December 2008*.

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)☒ Claim(s) *1-9* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

## Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____ .

# DETAILED ACTION

This office action is in response to the argument and remarks made by the applicant filed

on 12/24/2008.

## *Specification*

The title of the invention is not descriptive.  A new title is required that is clearly

indicative of the invention to which the claims are directed (See response to arguments section).

## *Claim Rejections - 35 USC § 101*

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or
> any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and
> requirements of this title.

Claim 9 is rejected under 35 U.S.C. 101 because it discloses "A computer program"

which is currently held to be non-statutory subject matter.

According to MPEP, chapter 2100:

> FUNCTIONAL DESCRIPTIVE MATERIAL:  "DATA STRUCTURES"
> REPRESENTING DESCRIPTIVE MATERIAL PER SE OR COMPUTER
> PROGRAMS REPRESENTING COMPUTER LISTINGS PER SE
>
> Data structures not claimed as embodied in computer-readable media are descriptive material per se and are
> not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam,
> 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data
> structures do not define any structural and functional interrelationships between the data structure and other claimed
> aspects of the invention which permit the data structure's functionality to be realized. In contrast, a claimed
> computer-readable medium encoded with a data structure defines structural and functional interrelationships
> between the data structure and the computer software and hardware components which permit the data structure's
> functionality to be realized, and is thus statutory.

Subject matter as "computer program having instruction stored on a computer readable

medium" may be applied.

## *Claim Rejections - 35 USC § 102*

1.      The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2.     Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Chavez (US 5,550,896).

3.     Regarding claim 1, Chavez discloses a roaming system comprising: one or more controllers (e.g. switching node, see Column 3, lines 15-16) provided for each of zones that constitute a wireless network; and a server (e.g. the mobility management application and network management systems, see Column 4, lines 21 and 31 respectively) communicatively connected to the controllers in the zones, wherein each of the controllers comprises storage means that stores (see Column 3, lines 27) identification information or authentication information (see Column 3, lines 24) given to wireless terminals for receiving a service, the wireless terminals being registered with the zone in which the controller resides, and each controller operates to detect the identification information on a wireless terminal from the storage means when a request for the service is received from the wireless terminal, and to provide the service to the wireless terminal if the identification information is detected or to issue a query or request for checking outside (from switching node 110 to mobility management application or network management system depending on the hierarchy) for the presence of the identification information (an integral part of the TSP, see column 4, line 19-20) if the identification information is not detected (see Column 4, lines 52-59); and the server is adapted to maintain information indicating which controller in which zone stores the identification information on the wireless terminals, and the server operates to, on receiving the query, detect a

controller that stores the identification information on the wireless terminal for which the

identification information is not detected, to communicate with the detected controller to confirm

the presence of the identification information (See column 4, lines 61-65) on the wireless

terminal which identification information is not detected, and to allow the controller that has

issued the query to provide the service to the confirmed wireless terminal (see Column 4, lines

24-31 and lines 45-65).


4.      In claim 2, Chavez discloses the roaming system according to claim 1, wherein the server

is integrated with one of the controllers (see Column 4, lines 16-17).


5.      Regarding claim 3, Chavez teaches the roaming system as indicated above according to

claim 1 and 2 respectively. Chavez does not teach explicitly the server such that it operates to

prohibit provision of the service to the confirmed wireless terminal if the query is received from

a controller in a particular zone. However, in a roaming system, there is an interface function

responsible for authenticating and deciding the provision or prohibition of service because when

the user moves to a site outside his/her assigned controller there must be a decision interface that

tests for authentication of the user and decides the provision or prohibition of the service

depending on the contract or the user profile, else the service will not be provided outside the

region of coverage of the assigned controllers.


6.      Regarding claim 4, Chavez discloses a mobile communication system that allows access

to a single directory information tree (e.g. network management systems, see Column 4, line 30

and item 115 in figure 1) from a plurality of directory servers (e.g. the mobility management

application) corresponding to a plurality of sites in a mobile communication network, and

comprises a plurality of authentication controllers (e.g. switching nodes, see Column 3, lines 14)

provided in the respective sites for authenticating mobile communication terminals that request a

service at each site, and wherein each of the plurality of authentication controllers comprises:

search request generation means that acquires identification information on a mobile

communication terminal and generates a search request directed to the directory server when a

request for a service is received from the mobile communication terminal;

search request transmission means that transmits the search request generated by the search

request generation means to the directory server in the corresponding sites; and

authentication processing means that determines whether or not to permit provision of the

service to the mobile communication terminal based on a search result acquired from the

directory server (see Column 3, lines 6-26. Even though the feature of permission or denial of

service based on search results is not explicitly mentioned, it is inherent in roaming systems as it

allows the service provider to selectively provide the service based on their profile and initial

selection of plans), and wherein each of the plurality of servers comprises: storage means that

stores identification information given to mobile communication terminals for receiving a

service, the mobile communication terminals being registered with the site corresponding to the

directory server; identification information detection means that detects, from the storage means,

the identification information on a mobile communication terminal specified in the search

request from the authentication controller or in the search request redirected from a directory

server corresponding to another site; search request redirection means that redirects the search

request from the authentication controller to a directory server located above or below (see

Column 16, lines 6-13) in the directory information tree among the directory servers

corresponding to other sites when the identification information on the mobile communication

terminal is not detected by the identification information detection means; and search result

provision means that provides a search result indicating success in detection of the identification

information to the authentication controller when the identification information on the mobile

communication terminal is detected in the other directory server to which the search request has

been redirected by the search request redirection means, or in the identification information

detection means, and wherein the authentication processing means operates to determine to

permit provision of the service to the mobile communication terminal when the search result

indicating success in detection of the identification information on the mobile communication

terminal is acquired from the directory server (see Column 3, lines 23-42 and claim 7).

7.      Regarding claim 5, Chavez further teaches the mobile communication system according

to claim 4, wherein: each directory server comprises reference information storage means that

stores address information on another directory server located above or below in the directory

information tree (See claim 7, Column 22, line 9-19); and the search request redirection means

operates to refer to the address information stored in the reference information storage means and

to redirect the search request to the other directory server located above or below in the directory

information tree (See claim 7, Column 21, line 53-59). Note that the communication and request

messages for authentication between switching nodes entail that each switching nodes has

addresses of others above or below in the hierarchy by which the communication is possible,

thus this feature is inherent).


8.      Regarding claims 6, 8, and 9 Chavez teaches a mobile communication system that allows

access to a single directory information tree having a hierarchical tree structure from a plurality

of server apparatus, wherein of the plurality of server apparatuses comprises:

entry management means that stores entries in a directory provided in a subtree in the directory

information tree, an attribute value of each entry being identification information given to any

one of the mobile communication terminals which are able to provide a service in a mobile

communication network (See column 4, lines 62-65 and column 9, lines 16-39);

Identification information detection means that detects the identification information on a mobile

communication terminal among the attribute values of the entries stored in the directory by the

entry management means (column 15, lines 59-61);

Search request transmission means that transmits a predetermined search request to another

server apparatus located above or below in the directory information tree when the identification

information or the authentication information on the mobile communication terminal is not

detected by the identification information detection means (See column 15, line 36 and lines 59-

61);

and service provision control means that allows provision of the service to the mobile

communication terminal when the identification information on the mobile communication

terminal is detected in the other server apparatus to which the search request has been

transmitted by the search request transmission means, or in the identification information

detection means, and that prohibits provision of the service to the mobile communication

terminal when no other server apparatus is located above or below in the directory information

tree or when the identification information on the mobile communication terminal is not detected

in the other server apparatus to which the search request has been transmitted by the search

request transmission means (See column 15, line 27-29).

9.      Regarding claim 7,  Chavez teaches the mobile communication system according to

claim 6, wherein: each server apparatus comprises reference information storage means that

stores address information on another server apparatus located above or below in the directory

information tree (See claim 7, Column 22, line 9-19); and the search request transmission means

operates to refer to the address information stored in the reference information storage means and

to transmit the search request to the other server apparatus located above or below in the

directory information tree (See claim 7, Column 21, line 53-59).


*Response to Arguments*


Applicant's arguments filed 12/24/2008 have been fully considered but they are not

persuasive.

In response to applicant's argument that the references fail to show certain features of

applicant's invention, it is noted that the features upon which applicant relies (i.e., "…each of the

controllers has the identification information for only the wireless terminals belonging to the

zone in which that controller resides and each controller does not have the identification

information on all the wireless terminals in the wireless network…) are not recited in the rejected

claim(s). Although the claims are interpreted in light of the specification, limitations from the

specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26

USPQ2d 1057 (Fed. Cir. 1993).

For the sake of clarifying in the reference, claim 1 elements are being interpreted as follow:

The switching node 108 is the resident controller or home zone controller, switching node 110 is

the visited switching node or simply other controller, And the mobility management application

on the higher hierarchy switching node, the identification information being authentication

information or SPID identifying the TSP unique to each PCS, and PCS being the wireless

terminal.

The applicant submits that Chavez does not teach each element in the claim and argues that the

reference does not teach the claimed invention or the unique feature of the invention because

Chavez discloses storing the authentication information in the visited switching node 110 after

being retrieved from the mobility management, the latter that determines the home switching

node that stores the authentication information, unlike the feature of the invention where there is

no further storage of the authentication information in switching node that are being visited.

While Chavez does store *temporarily* in the switching node 110 the authentication information

for the purpose of providing the service in addition to being stored in the mobility management

application of the switching nodes in the subsequent hierarchy, the examiner respectfully

disagrees with the traverse made by the applicant because the steps carried in claim 1 reads on

Chavez disclosure as the elements of claim 1 are also functions performed in Chavez.

Additionally the examiner acknowledges the applicant that the controllers in claim 1 are not

disclosed to have the identification information of only the wireless terminals that are residing in

and registered to said controllers (belonging to particular zone). In another word, the storage of

identification information in a controller may include also wireless terminal that reside in

different zones served by other controllers.

Regarding claims 4, 6, 8, and 9, the applicant submits that Chavez lacks disclosure to teach the

claims and therefore the anticipation cannot be maintained. The examiner respectfully disagrees

with the traverse made by the applicant regarding the claims. The examiner notes that the

applicant in regards to these claims only asserts that Chavez does not explicitly or inherently

teaches the claimed invention without specifically pointing out how the language of the claims

patentably distinguishes them from the reference.

Regarding claims 2, 3, 5, and 7, the rejection is maintained as they inherit the deficiency of the

independent claims.

### *Conclusion*

**THIS ACTION IS MADE FINAL.**  Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action.  In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action.  In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to ISSAM CHAKOUR whose telephone number is (571) 270-5889.

The examiner can normally be reached on Monday-Thursday (8:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Perez Rafael can be reached on (571) 272-7915. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/I. C./
Examiner, Art Unit 2617


/Rafael Pérez-Gutiérrez/
Supervisory Patent Examiner, Art Unit 2617